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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 538,475	03 30 2000	Masao Tokita	Q58571	8142

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EXAMINER

NGUYEN, THUKHANH T

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 07/03/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/538,475

Applicant(s)

TOKITA, MASAO

Examiner

Thu Khanh T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 11-22 in Paper No. 7 is acknowledged.

Specification

2. The disclosure is objected to because of the following informalities: on page 23, lines 2 & 6, shouldn't the drive motor 146 be 156, as shown in the drawings? Page 26, line 2, shouldn't the lord sensor be --the load sensor--? Page 30, lines 38, shouldn't the upper plunger 187 be 186? Page 32, line 37, the cross bar 26 should be the cross bar 206.

Appropriate correction is required.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Apparatus for automatically loading power material into a mold.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 14, 16, 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14, line 6 and claim 17, line 11 recite the limitation "said top surface". There is insufficient antecedent basis for this limitation in the claims.

Claim 16 recites the limitation "said sintering mold" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 cites the phrases "said hopper" and "said at least one hopper". Are these hoppers the same? On lines 11-12, how can one hopper comprises a plurality of hoppers? Clarification is needed.

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The term "may be" in claim 20, line 6 is a relative term, which renders the claim indefinite.

Clarification is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Hauser et al (5,362,434)

Hauser et al teach a molding press comprising a mold conveyor system (4, 5) for supporting and conveying the mold, a movable filling mechanism (30-36) for filing the material into the mold, wherein the filing mechanism is located along a transportation path of the mold conveyor system (col. 4, lines 1-14), a press unit (6-7', col. 2, lines 60-62).

Hauser et al further disclose a mold conveyor system having a guide rail (2, 10, 11, & 13) extending to cover a predetermined range and a movable carrier (4, 5) moving along the guide rail and capable of supporting for vertical displacement of the mold (col.3, 51-55); wherein the movable carrier comprises a movable base (5) and a receiving plate (18) supporting the mold; the conveyor system comprises an upper stop member (3) and a drive unit (9) for driving the movable base in both directions.

8. Claims 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Plocher et al (3,887,317).

Plocher et al teach a pressing apparatus having a powder filling mechanism for filling different power materials into a mold. The filling mechanism comprises a support plate (48) having a top surface and a hole (Fig. 4, 48), wherein the mold is fitted in the hole without any substantial clearance in between

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and with a top surface of the support plate and the top surface of the mold being flush with each other (Fig. 3), a plurality of filling shoes (40) movable on the top surface of the support plate along a straight path between different positions and in either direction by a hydraulic cylinder (60) to charge the mold with different materials.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 12, 14, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauser et al (5,362,434) as applied to claim 11 above and further in view of Yamamoto (4,373,888).

Hauser et al disclose a pressing mechanism as described above. Hauser et al ('434) fail to disclose a trickle system for strickling off excess material on the surface of the mold.

Yamamoto discloses a tablet press for pressing powder material into tablets, comprising a hopper (25) supplying powder material to a feeder (26). The feeder (26) filled each die cavity (12) and any excess material is scrapped off by the edge of the feeder (col. 3, lines 11-17).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Hauser et al ('434) by providing a powder scrapper or a strickle mechanism at the edge of the hopper as taught by Yamamoto; because the scrapper would wipe off the excess material, the mold surface would obviously be cleaned and the excess material can be recycled back to the feeder preventing material lost during the molding process.

11. Claims 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hauser et al ('434) as applied to claim 11 above, and further in view of Hauser et al (5,433,903).

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Hauser et al ('434) disclose a press as described above, but fail to disclose a weight measuring means.

Hauser et al ('903) disclose a brick press comprising a weight-measuring unit (10) for providing the same amount of material into the cavities.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Hauser et al ('434) by providing a weight measuring unit as taught by Hauser et al ('903) because it would obviously provide the same amount of material into the die cavities and the uniformity of the brick would be easier to automatically control.

12. Claims 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauser et al ('434) as applied to claim 11 above, and further in view of Rosell (861,903).

Hauser et al disclose a press as described above. However, Hauser et al fail to disclose a strickle mechanism, a plurality of filling mechanism, a push-up member, a push-up member drive unit, and a material measure unit.

Rosell discloses a block press comprising material measure units (34) for providing a predetermined amount of material into the mold cavities, a plurality of filling mechanism (33), a strickle mechanism (col. 1, lines 13-15), which could be part of the feeder, for dragging back any excess material over the mold surface; a push up member (44) for pushing up the lower press member (27) into the bore (31) of the die cavity, a drive unit (56, 58, 38, 41 and 47) for driving the push up member.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the apparatus of Hauser et al by providing a material measure unit, a plurality of filling mechanism, a strickle mechanism, a push up unit and a drive unit as taught by Rosell, because a predetermined amount of different material would be fed into the mold cavities by a plurality feeders; the

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excess material would be cleaned off the mold surface and recycled back to the feeders; the drive unit and the push up unit would facilitate the movement of the lower plunger into the mold cavity.

13. Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hauser et al (*4343) in view of Yamamoto or Rosell as applied to claims 12, 14 and 17-18 above, and further in view of Kato et al (5,603,880).

The combinations of Hauser et al and Yamamoto or Hauser et al and Rosell disclose a powder pressing apparatus as described above. The combinations fail to disclose that the filling mechanism comprises a rotary table capable of the indexing movement.

Kato et al disclose a powder pressing apparatus comprising a turntable (3) rotatable by a driving unit (2). The turntable includes a plurality of filling holes (11) displaced above the mold cavities (9) for distributing powder material.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the combinations of Hauser et al and Yamamoto or Hauser et al and Rosell by providing a filling mechanism displaced on a turntable as taught by Kato et al, because the turntable would support a plurality of feeders on a smaller area and would obviously be able to control the uniformity movements of the feeders during the pressing.

Double Patenting

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the

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conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 11 and 13-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-20 of U.S. Patent No. 6,383,446.

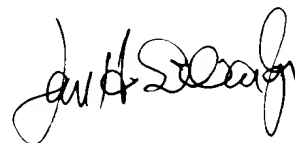
Although the conflicting claims are not identical, they are not patentably distinct from each other because they also disclose an apparatus for automatically loading powder material into a mold, which comprises a conveyor system for conveying the mold through different stations (claims 8, 14-15 & 20), a plurality of powder filling mechanism with a plurality of hoppers positioned on a rotary table to fill different powder materials into the mold by indexing movement of the rotary table (claims 13 & 15), an upper plunger and a lower press plunger (claims 8 & 17-18).

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 703-305-7167. The examiner can normally be reached on Monday-Thursday and on alternate Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jan H. Silbaugh can be reached on 703-308-3829. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

TN
July 1, 2002



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